

## CLAIMS

What is claimed is:

- 1 1. A method comprising:
  - 2 receiving from a requester a request to access an information;
  - 3 if a link to a first remote computer containing the information is down,
  - 4 establishing the link while concurrently returning a plurality of imposter responses
  - 5 until the link is established.
- 1 2. The method of Claim 1 wherein the request is a request to access information  
2 about a second remote computer identified by a domain name.
- 1 3. The method of Claim 1 wherein the plurality of imposter responses comprise a  
2 plurality of imposter domain names.
- 1 4. The method of Claim 3 wherein returning a plurality of imposter domain  
2 names comprises:
  - 3 appending a text string to the domain name to create a current imposter
  - 4 domain name that is one of the plurality of imposter domain names; and
  - 5 instructing the requester that the domain name is an alias for the current
  - 6 imposter domain name.
- 1 5. The method of Claim 4 further comprising:
  - 2 recursively receiving from the requester a plurality of requests to access
  - 3 information about a remote computer identified by one of the plurality of imposter
  - 4 domain names; and
  - 5 if the link remains down, continuing to establish the link, incrementing the
  - 6 current imposter domain name to form a next current imposter domain name of the
  - 7 plurality of imposter domain names, and instructing the requester that the current
  - 8 imposter domain name is an alias for the next current imposter domain name.

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1    6.    The method of Claim 5 further comprising:  
2                 detecting that the link is established; and  
3                 after the link is established,  
4                         converting the current imposter domain name to the domain name; and  
5                         informing the requester that the imposter domain name is an alias for  
6                 the domain name.

1    7.    The method of Claim 6 further comprising:  
2                 receiving from the requester a second request to access the information after  
3                 the link is established.

1    8.    The method of Claim 7 further comprising:  
2                 after the link is established,  
3                         forwarding the second request to the first remote computer;  
4                         receiving a response to the second request; and  
5                         forwarding the response to the second request to the requester.

1    9.    The method of Claim 7 wherein the second request is a request to access  
2                 information about the second remote computer identified by the domain name.

1    10.   The method of Claim 5 further comprising:  
2                 determining whether a maximum number of recursions has been exceeded,  
3                 and if so, returning an appropriate error.

1    11.   The method of Claim 5 further comprising:  
2                 determining whether a maximum amount of time has been exceeded, and if so,  
3                 returning an appropriate error.

1    12.   The method of Claim 1 wherein the requester is a domain name system (DNS)  
2                 resolver.

1    13.   The method of Claim 1 wherein the request is initiated by a local application  
2                 program.

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- 1    14.    The method of Claim 1 wherein the request is initiated by a remote application
- 2    program.
  
- 1    15.    The method of Claim 1 wherein the first remote computer is a server.
  
- 1    16.    The method of Claim 1 wherein the link is a network connection.
  
- 1    17.    The method of Claim 1 wherein the requester is an Internet web browser, the  
2    request is an hypertext transfer protocol (HTTP) “get” instruction, and the plurality of  
3    imposter responses comprise at least one temporary web page and at least one HTTP  
4    “meta refresh” instruction.
  
- 1    18.    A method comprising:  
2         receiving a domain name system (DNS) request initiated by an application  
3         program;  
4         if no Internet connection has been established, precluding a user from  
5         receiving an error message by establishing a dial-up connection to the Internet while  
6         concurrently returning a plurality of imposter domain names until the dial-up Internet  
7         connection is established.
  
- 1    19.    The method of Claim 18 wherein returning comprises:  
2         forming a current imposter domain name by appending an information to the  
3         domain name; and  
4         sending a canonical name (CNAME) response stating that the domain name is  
5         an alias for the current imposter domain name.
  
- 1    20.    The method of Claim 19 further comprising:  
2         while establishing the dial-up connection, recursively  
3         receiving from the application program a request to access information  
4         about a remote computer identified by one of the plurality of imposter domain  
5         names;

6 forming a next current imposter domain name of the plurality of  
7 imposter domain names by modifying a portion of the information of the  
8 current imposter domain name; and  
9 sending a CNAME response stating that the current imposter domain  
10 name is an alias for the next current imposter domain name.

- 1 21. The method of Claim 20 further comprising:  
2 detecting that the dial-up connection is established; and  
3 after the dial-up connection is established,  
4 converting the current imposter domain name to the domain name; and  
5 sending a CNAME response stating that the current imposter domain  
6 name is an alias for the domain name.
- 1 22. The method of Claim 21 further comprising:  
2 receiving from the application program a second request to access information  
3 about the remote computer identified by the domain name after the dial-up connection  
4 is established.
- 1 23. The method of Claim 22 further comprising:  
2 after the dial-up connection is established,  
3 forwarding the second request to a server;  
4 receiving a response to the second request; and  
5 forwarding the response to the application program.
- 1 24. A network host comprising a processor and a machine readable medium  
2 containing instructions which when executed by the processor cause the processor to  
3 perform operations comprising:  
4 receiving from a requester a request to access an information;  
5 if a link to a first remote computer containing the information is down,  
6 establishing the link while concurrently returning a plurality of imposter responses  
7 until the link is established.

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1    25.    The network host of Claim 24 wherein the request is a request to access  
2    information about a second remote computer identified by a domain name.

1    26.    The network host of Claim 24 wherein the plurality of imposter responses  
2    comprise a plurality of imposter domain names.

1    27.    The network host of Claim 26 wherein returning a plurality of imposter  
2    domain names comprises:

3                 appending a text string to the domain name to create a current imposter  
4    domain name that is one of the plurality of imposter domain names; and

5                 instructing the requester that the domain name is an alias for the current  
6    imposter domain name.

1    28.    The network host of Claim 27 wherein the instructions cause the processor to  
2    perform further operations comprising:

3                 recursively receiving from the requester a plurality of requests to access  
4    information about a remote computer identified by one of the plurality of imposter  
5    domain names; and

6                 if the link remains down, continuing to establish the link, incrementing the  
7    current imposter domain name to form a next current imposter domain name of the  
8    plurality of imposter domain names, and instructing the application program that the  
9    current imposter domain name is an alias for the next current imposter domain name.

1    29.    The network host of Claim 28 wherein the instructions cause the processor to  
2    perform further operations comprising:

3                 detecting that the link is established; and  
4                 after the link is established,

5                 converting the current imposter domain name to the domain name; and  
6                 informing the requester that the imposter domain name is an alias for  
7    the domain name.

1    30.    The network host of Claim 29 wherein the instructions cause the processor to  
2    perform further operations comprising:

3                 receiving from the requester a second request to access the information after  
4    the link is established.

1    31.    The network host of Claim 30 wherein the instructions cause the processor to  
2    perform further operations comprising:

3                 after the link is established,  
4                 forwarding the second request to the first remote computer;  
5                 receiving a response to the second request; and  
6                 forwarding the response to the second request to the requester.

1    32.    The network host of Claim 24 wherein the requester is a domain name system  
2    (DNS) resolver.

1    33.    The network host of Claim 24 wherein the request is initiated by an  
2    application program on the host.

1    34.    The network host of Claim 33 wherein the application program is an Internet  
2    web browser.

1    35.    The network host of Claim 24 wherein the request is initiated by an  
2    application program on a remote host.

1    36.    The network host of Claim 24 wherein the requester is an Internet web  
2    browser, the request is an hypertext transfer protocol (HTTP) “get” instruction, and  
3    the plurality of imposter responses comprise at least one temporary web page and at  
4    least one HTTP “meta refresh” instruction.